

Appl 09/844,304

Amdt dated August 12, 2003

Reply to Office Action of July 11, 2003

Remarks/Arguments

Claims 1, 2, 7, 16, 17 and 24-28 remain in this application. Claims 3, 5, 6, 9-11 and 13 have been canceled in this Amendment. Claims 4, 8, 12, 14, 15 and 18-23 have been canceled in a previous amendment. New claim 29 has been added.

Claims 1 and 2 have been rejected under 35 USC 102(b) over Matkovich et.al. (US 4,797,259). The Office Action states that the reference teaches a 96 well filter on a plate with filter adhesively bonded to the bottom of the well with filtration by pressure differential and microfiltration as in the present claims.

Claims 1 and 2 all require the use of a common filter sheet across all the wells and the use of an adhesive as the seal between the common filter sheet and the plate that forms the liquid tight seal between them. These elements are neither taught nor suggested by the reference. The citations provided by the Examiner to support that proposition of an adhesive being used by the reference fail to support that position. To the contrary, those sections either fail to suggest any means of attachment (such as Col 1, lines 68-Col 2, line 5, "At the bottom of the well and forming a hydrophobic, liquid tight seal at the periphery thereof is placed a composite membrane comprising three layers which are, preferably, in intimate contact with one another. Proceeding from the top or upstream side to the bottom or downstream side of the composite membrane, in sequence, the first layer is a reaction or filtration layer formed from a thin, lipophilic microporous membrane, such as a membrane of filtration material."), or does not state that the use of an adhesive *per se*). At the Column 3, lines 34-37, the reference merely states that the membrane is "adhered" to the brim of the opening. It does not teach the use of an adhesive to do the adhering. Likewise, the cited

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portion at Column 12, lines 45-60 teaches the use of heat tacking the separate three layers together (note the lead-in paragraph to the one cited by the Examiner, especially line 38 "...the layers may be welded or tacked...") or melt forming two or more of the layers together. Further, the reference clearly teaches the need for heat bonding to "adhere" the composite membrane as is stated in Column 11, line 23-27 as this creates the "dense, somewhat compacted, liquophobic zone" which prevents cross-talk from occurring. This is the problem that the reference is addressing and the use of heat, especially with pressure (Col 11, lines 40-41) is taught as the means for obtaining this result. It is clear that the reference fails to teach the use of an adhesive as the sealing means.

As such, these claims are not anticipated by the cited reference.

Claims 1, 2, 7, 16, 17, 27 and 28 have been rejected under 35 USC 103(a) over Clark et.al. (US 5,223,133) in view of Cole et.al. (US 4,246,339). The Office Action states that Clark does not state using an adhesive to seal the membrane to the bottom of the well, but that Cole does. The Office Action states that it would have been obvious to use an adhesive to seal the membrane as taught by Cole in the "any conventional bonding method" of Clark.

Both Clark and Cole use individual filters for each and every well. Claims 1 and 27 as amended require the use of a common sheet of filter material. The use of individual filter pieces appear to be an essential item of Clark in order to allow the transfer of Clark to occur. As there is no teaching or suggestion in the references to consider the use of a common sheet of filter and there is a specific teaching and need in Clark to have individual pieces of filter, the present claims would not have been obvious to one of ordinary skill in the art in view of the cited combination of references.

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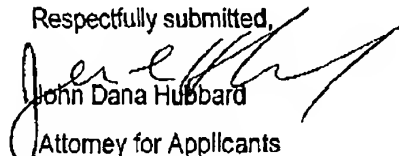
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As to Claim 7 it is argued that Clark suggest the uses of light or thermal adhesives. Clark suggests the use of light or heat activated adhesives that are rendered tacky by the heat or light (Column 4, line 65). These adhesives are not used to seal a membrane to the bottom to the well but rather are used in the transfer plate to stick to and tear the bound filters from the wells after filtration to recover the retentate on the upper surface of the filter intact and untouched. One of ordinary skill in the art would not have looked to Clark for the teaching of adhesives to bond the membrane in place as the tacky adhesive would not suggest to one that a good seal had been obtained between the filter and the well. Moreover, one reading Clark is taught a perfectly suitable method for sealing the filter, to use a heat bond. It would not have been obvious to one of ordinary skill in the art to use the light or heat adhesives of Clark.

This amendment is submitted after a Final Office Action. Entrance of the Amendment is respectfully requested as it is believed it places the case in condition for allowance and/or places the case in position for Appeal.

Entry, reconsideration and allowance are respectfully requested in view of the foregoing amendment and remarks.

Respectfully submitted,


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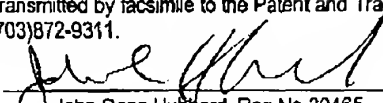
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Date: August 12, 2003

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